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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/600,795	06/20/2003	Tadashi Kotani	NGB-14886	9681
40854	7590	03/25/2004	EXAMINER	
RANKIN, HILL, PORTER & CLARK LLP 4080 ERIE STREET WILLOUGHBY, OH 44094-7836			BROWN, KHALED	
			ART UNIT	PAPER NUMBER
			2877	

DATE MAILED: 03/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/600,795

Applicant(s)

KOTANI, TADASHI

Examiner

Khaled Brown

Art Unit

2877

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 4 is/are rejected.
- 7) ☒ Claim(s) 2 and 3 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>6-20-03</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Specification

The disclosure is objected to because of the following informalities: on p. 2 line 22, the phrase "to such a degree being capable of controlling an interferometer" is grammatically incorrect. On p. 3 line 20, the word "lager" is a misspelling, on p. 6 line 8, the word "bam" is a misspelling. On p. 7 lines 15-16, the phrase "is provided with a means" is grammatically incorrect.

Appropriate correction is required.

Claims 2 and 3 are objected to because of the following informalities: Claim 2 recites the limitation "the next circle" in line 12. There is insufficient antecedent basis for this limitation in the claim. For purposes of examination the examiner has assumed that the phrase should read "a next circle". Claim 3 depends from claim 2 and thus contain the same deficiencies. Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2877

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wijnjtjes et al (US 4711573).

Re clm 1: Wijnjtjes et al discloses a method of adjusting a fixed mirror of a double-beam interferometer including a control interferometer, comprising: detecting a laser interference light beam from the control interferometer (Col 4 lines 39-44); and adjusting an angle of the fixed mirror with respect to a laser light beam axis so that the intensity of interference of the laser light beams becomes maximum or the laser light beams become in an arbitrary interference state (Col 5 lines 49-54). However, Wijnjtjes et al does not expressly state that during the initial adjustment the laser light beams do not interfere at all. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to begin the adjustment of the fixed mirror at a state where laser light beams do not interfere at all because during the initial set up of an interferometer the mirrors are not in critical alignment and without this critical there will not be any initial interference of the laser light beams.

Re clm 4: Wijnjtjes et al discloses an interferometric spectrophotometer comprising: a control interferometer having fixed mirror; a photo detector for detecting a laser interference light beam from the control interferometer; and an adjusting mechanism for adjusting an angle of the fixed mirror with respect to a laser light beam axis so that the intensity of interference of the laser light beams becomes maximum or the laser light beams become in an arbitrary interference state (Col 5 lines 49-54). However, Wijnjtjes

et al does not expressly state that the adjustment mechanism adjusts the fixed mirror from a state where laser light beams do not interfere at all. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to begin the adjustment of the fixed mirror at a state where laser light beams do not interfere at all because during the initial set up of an interferometer the mirrors are not in critical alignment and without this critical alignment there will not be any initial interference of the laser light beams.

Allowable Subject Matter

Claims 2 and 3 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: the prior art of record fails to disclose or suggest the limitation of "measuring amplitudes of the laser interference light beam while moving the posture of the fixed mirror to points on a circle around a point where the amplitude becomes larger than the reference value as a center" in conjunction with the rest of the claimed subject matter.

As allowable subject matter has been indicated, applicant's reply must either comply with all formal requirements or specifically traverse each requirement not complied with. See 37 CFR 1.111(b) and MPEP § 707.07(a).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Thompson et al 4480914, Buijs et al 4345838, Curbelo et al 5166749, Schindler 3809481, Westerberg 4385835 and Ge 6707559.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khaled Brown whose telephone number is 571-272-2411. The examiner can normally be reached on M-F 8:30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank G. Font can be reached on 571-272-2415. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



KB
March 8, 2004